

OHP Review Version 09/28/04

# **SUPPLEMENTAL PROCEDURES FOR PROTECTION OF CULTURAL RESOURCES FROM PRESCRIBED FIRE EFFECTS**

A CULTURAL RESOURCES AMENDMENT  
TO  
THE STATE PROTOCOL AGREEMENT

BETWEEN

CALIFORNIA BUREAU OF LAND MANAGEMENT  
AND  
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

The purpose of this Amendment is to provide procedures for considering the effects of prescribed fire on cultural resources within the lands administered by California Bureau of Land Management and on lands outside BLM's jurisdiction, but which may be affected by BLM-managed prescribed fire.

These supplemental procedures are an Amendment to the State Protocol dated April 6, 1998, which is scheduled for termination on October 25, 2004. These supplemental procedures will remain in effect when that Protocol is terminated and automatically will become an Amendment to a successor Protocol document.

This Amendment satisfies the requirements of Section 106 of the National Historic Preservation Act as an amendment to the State Protocol Agreement and is adopted under Clause X.B. of the State Protocol Agreement. This Amendment deviates from the Protocol in Section VI, Thresholds for SHPO Review, which states, "*BLM shall complete the inventory, evaluation and assessment of effects and document all findings, including negative inventories and no effect determinations, in BLM files before proceeding with project implementation.*" This Amendment allows for phased inventory and implementation of prescribed fire projects prior to completion of all phases of inventory.

These supplemental procedures include the text of the Amendment and attached Definitions (Attachment 1) and Standard Protection Measures (Attachment 2).

## **Key Concepts**

Reintroduction of fire into the wildland landscape managed by the Bureau of Land Management (BLM) is an essential technique for reducing fuel loads that may translate into catastrophic wildfires. General benefits of the reintroduction of fire into the landscape include ecosystem health, perpetuation of fire-adapted vegetation, and protection of life and property. Benefits for cultural resources and their management include subjecting cultural resources to controlled and

relatively cool fire rather than uncontrolled, hotter wildfires and the removal of dense fuel loads that may preclude or inhibit the identification of cultural resources during field surveys. California ecosystems are adapted to cycles of natural and human-caused fires resulting in ecosystems that are fire-adapted or fire-dependent. Virtually every archeological site on BLM-administered lands has been subjected to the effects of wildfire.

Benefits of Prescribed Fire. Low- to moderate-intensity prescribed fires generally have few direct impacts to non-combustible cultural resources that have previously been exposed to wildland fire. However, the physical alterations that are known to occur, including spalling and alteration of obsidian hydration bands, and the increased exposure of artifacts to illicit collecting, are surpassed by the benefits of prescribed fires to resources management.

Special Management and Regulatory Activities. The principal goal of these alternative procedures is streamlining within the context of the State Protocol Agreement. Prescribed fire has a number of unique conditions which warrant development of alternative procedures specific to it. These conditions include the wildfire exposure of nearly all archeological sites across time, dense vegetation and ground cover which limit the accuracy of surveys conducted for prescribed fire projects, and benefits of prescribed fire to cultural resources management.

Phased Inventory: Phased inventory is an alternative procedure for identification of cultural resources within the Area of Potential Effect of a prescribed fire. Phased inventory is a procedure whereby the identification effort will be divided into a pre-burn and a post-burn survey effort. Post-burn surveys are warranted where vegetation density and limited ground visibility limit the accuracy and increase the cost of pre-burn survey efforts. Post-burn surveys will also be conducted within the perimeter of escaped fires that occur coincident to a planned prescribed fire. Pre-burn surveys will be conducted for all ground-disturbing activities planned for a prescribed fire, for areas where flammable cultural resources may be expected, and for areas where other at-risk cultural resources may be expected.

Attachment 1 – Page 2

## Specific Stipulations

### I. Scoping the Undertaking

Identification activities should use a discovery procedure consistent with the management needs for information and the character of the area in which the planned prescribed fire will occur. Careful selection of methods, techniques and level of detail is necessary so that the information developed or gathered will provide a sound basis for making decisions.

Individuals responsible for planning and implementing prescribed fires should, as soon as a prescribed fire is proposed and with as much lead time as possible, notify the Field Office Archeologist of the proposed undertaking. Information provided to the Field Office Archeologist shall include: boundary of the burn project, map of projected burn intensities, proposed ground disturbance, and other information deemed important by the Field Office Archeologist.

Attachment 1 – Page 3

## II. Identification

A. Assessing Information Needs. The Field Office Archeologist shall conduct background research to identify cultural resources known or thought to exist within the APE of the proposed prescribed fire. Based on this background research, “at-risk cultural resources” will be identified. Sources of information that should be consulted include Cultural Resource inventory files at Field Offices and Information Centers, land use and ownership records, fire history atlases, geological maps, and documented areas of natural resources valued or used by Native Americans.

B. Identifying At-risk Cultural Resources. At-risk cultural resources are documented individual properties or classes of cultural resources that: (1) are eligible, or potentially eligible for the National Register of Historic Places and (2) for which the important attributes of the known individual property or class of cultural resource may be substantially damaged or destroyed by the prescribed fire.

At-risk cultural resources within prescribed fire areas will usually include potentially significant artifact classes and potentially significant combustible standing structures and features. At-risk cultural resources may also include individual properties or classes of properties which, through the vegetation clearing effect of the fire, become accessible to artifact theft or damage. Professional judgment plays an important role in identifying at-risk cultural resources, particularly when the effects of fire on certain types of archaeological materials are poorly understood.

C. Developing a Cultural Resources Inventory and Management Strategy. Cultural resources identification and management strategies for prescribed fires will be guided by a Cultural Resources Inventory and Management Strategy (Strategy). The Strategy document shall include but not necessarily be limited to

Project description (e.g. planned burn techniques and preparation, projected burn intensities, and timeline);

Bibliography of references consulted during assessment of information needs;

A table of at-risk cultural resources a brief rationale for designation, either individually or by resource class;

Identification methods proposed for at-risk cultural resources;

Identification of areas with a high probability of containing at-risk cultural resources, but with ground cover conditions that preclude their identification; and,

Planned post-burn survey with specific information on location, survey area, and projected costs.

Attachment 1 – Page 4

#### D. Locating At-Risk Cultural Resources.

1. **Methods and Techniques.** Methods for locating at-risk cultural resources should be appropriate to the nature and visibility of the resource classes. Reconnaissance techniques may be appropriate for the identification of certain aboveground resources and selective examination of surface features may be appropriate to other classes of at-risk cultural resources. The methods selected for identification efforts, and the rationale for these methods, shall be documented in the Plan.

Areas of proposed ground disturbance shall be surveyed (e.g., pre-treatment, control lines, new or reconstructed access roads, helispots, staging areas and camps) if no acceptable survey has been conducted in prior years.

2. **Post-burn Identification.** At the discretion of the Field Office Archeologist, field survey may be deferred for areas where preexisting vegetation conditions prevent the reliable and efficient survey. These areas may be selectively examined after the prescribed fire, when ground visibility has improved.

3. **Documentation.** All cultural resources including at-risk cultural resources will be documented on DPR primary record forms. At risk-cultural resources will be further documented on appropriate subforms. All documented properties will be submitted to the appropriate Information Center for assignment of a primary number and trinomial designation.

### III. Evaluation

At-risk cultural resources situated within prescribed burn areas shall be evaluated pursuant to 36 CFR 800.4(c) prior to project implementation unless protective or avoidance measures are taken to ensure avoidance of adverse effect (Attachment 2). The Field Office Archeologist shall consult with project planning staff to determine the feasibility and likely effectiveness of proposed avoidance and protection measures. Standard protection measures are described in Appendix A of this document. The BLM shall evaluate all at-risk cultural resources where adverse effect cannot be avoided.

Cultural resources that are not identified as at-risk shall not be evaluated.

### IV. Protection and Treatment

A. When No At-Risk Cultural Properties Are Found. If no at-risk cultural resources are situated within the APE of the prescribed fire, BLM may proceed with the prescribed fire without further consideration to cultural resources. The information gathering and inventory process shall be documented.

B. When At-risk Cultural Resources Are Present. When at-risk cultural resources are present within the APE of the prescribed fire, BLM shall choose one of three alternatives, according to specific circumstances.

1. When Protection Is Possible and Desirable. Cultural resources at-risk may be protected from damage through the application of standard protection measures (Appendix A). If BLM chooses an alternative form of protection or avoidance not specifically enumerated in Appendix A, BLM shall initiate consultation with the SHPO prior to completing environmental analysis. A report will be completed which documents the inventory process, resource evaluations and protective measures selected for the at-risk cultural resources.

2. When Cultural Resources Will Not Be Protected. BLM may determine that the protection of at-risk cultural resources is infeasible or undesirable. If BLM chooses not to protect at-risk cultural resources, BLM shall evaluate those resources by applying the National Register of Historic Places criteria for eligibility described at 36 CFR 60.4. When such evaluation determines that at-risk cultural resources are NRHP eligible or retain moderate to high cultural values, and the BLM determines that it cannot protect those resources by applying the standard protection measures described in Appendix A, then the BLM shall initiate consultation with the SHPO prior to completion of environmental analysis. A report will be completed which documents the inventory process and resource evaluations.

## V. Post-Burn Inventory

Post-burn inventory is an important requirement of these procedures. Post-burn inventory is intended to inventory land previously inaccessible, monitor effectiveness of pre-burn survey, and identify need or opportunity for further management of cultural resources. Re-entry for inventory in the post-burn area shall be complete survey or sample survey. When a sample survey is planned the percentage of surveyed area will reflect the general cultural resource sensitivity of the area and selected survey areas will reflect the professional judgment of the Field Office Archeologist. The rationale for selecting post-burn survey areas and methods of inventory will be included in the Strategy document prepared prior to burn implementation. Post-burn survey may be directed to previously unsurveyed lands, previously surveyed lands, areas thought to contain cultural resources or samples within environmental zones

Post-burn survey should be conducted within one year of the fire and shall be scheduled to take advantage of optimum post-burn ground visibility. The results of post-burn survey will be documented and that documentation shall detail the survey areas selected and the survey methods employed.

## VI. Inadvertent Effects

Should a prescribed fire become uncontrolled or damage at-risk cultural resources in unanticipated ways, the BLM Field Office Archeologist will take the following steps.

A. Discovery. The SHPO will be notified by BLM immediately upon discovery that a prescribed fire damaged a property that was planned for avoidance or protection, or a previously unidentified at-risk cultural resource. If the undertaking has not been completed at the time the

effect is discovered, all activities local and threatening to the property will cease and efforts will be taken to avoid further harm to the property until the following consultations are completed.

**B. Consultation and Reporting.** Consultation will be initiated within seven days between BLM and the SHPO to develop an interim course of action to avoid further effects to cultural resources. If agreement cannot be reached, the SHPO will provide written comments to the BLM who will then initiate consultation with the Council.

If agreement on an interim course of action cannot be reached between the BLM and Council, then the BLM will provide the Council with documentation on the issues and feasible steps that could be taken. The BLM will consider the comments, and notify the Council, SHPO, and any interested parties of its decision before proceeding with the subject or similar undertaking(s).

If the undertaking has already been concluded when an effect to a property has been discovered, the BLM and SHPO shall develop a course of action, which BLM will implement within a specified time period. This course of action will be described in the report of the incident, as described below.

Within six months of discovering the inadvertent effect and notifying the SHPO, BLM will provide the SHPO, Council if it is a participant and other interested parties with a report describing the undertaking and the circumstances surrounding the effects. This report must include information regarding the: type of property affected; property's NRHP status; nature of the effects; date effects were identified; location of the property; condition of the property prior to and after the effect; steps taken to treat effects; course of action proposed; and other pertinent information. BLM may develop an alternative reporting schedule, with concurrence from the SHPO.

If the inadvertent effects involve the failure of standard protection measures listed in Attachment 2 or a BLM failure to ensure that such measures were adequately implemented, then the report will describe the failure, the reason for that failure, and measures that will be taken to prevent similar future occurrences.

In the event that American Indian human remains, unassociated funerary objects, or grave goods are affected, BLM shall comply with applicable State laws and/or NAGPRA as outlined in 43 CFR 10.

## VII. Reporting

**Coordination with Programmatic Agreement.** Projects completed under this Amendment to the State Protocol Agreement shall be listed in the California BLM/SHPO Annual Report. Project information to be incorporated in the Annual Report shall include the name and acreage of each prescribed fire; a summary of the results of each study, including area surveyed before and after the prescribed fire and the numbers of at-risk cultural resources identified, evaluated, and protected; and, a summary of inadvertent effects.

### VIII. Amendment and Termination

The parties to this Amendment shall review the terms of this Amendment during scheduled reviews of the Statewide Protocol Agreement in order to determine whether continuation, amendment, or termination is appropriate. Either party may terminate this Amendment by providing 120 days notice. During the period following notice of the intent to terminate, both parties to this Amendment shall enter active negotiations to avoid termination.

This Amendment shall expire and have no further force or effect at midnight of the fifth anniversary of the Amendment's date of execution.

**STATE DIRECTOR, BUREAU OF LAND MANAGEMENT, CALIFORNIA**

---

By Mike Pool

Date:\_\_\_\_\_

**STATE HISTORIC PRESERVATION OFFICER, CALIFORNIA**

---

By Milford Wayne Donaldson

Date:\_\_\_\_\_

## Attachment One: Definitions

---

Attachment 1 – Page 9



# ATTACHMENT ONE

## DEFINITIONS

At-Risk Cultural Resources At risk cultural resources types are listed, eligible, or potentially eligible National Register properties and susceptible to direct or indirect damage through the use of prescribed fire. Such resources may include those constructed of combustible materials, rock art, and those properties which may become more accessible following removal of protective, obscuring vegetative cover.

Phased Inventory Inventory divided into pre-burn and post-burn components. Pre-burn inventory is directed toward literature review and survey of areas where, in the judgment of the Field Office Cultural Resource Specialist, there is a high probability discovering at-risk cultural resources. Survey of areas of dense vegetative cover may be deferred where such cover precludes or makes difficult the discovery of cultural resources. Post-burn survey is undertaken in areas where both fuels have been removed and where there is a high to moderate likelihood of discovering cultural resources.

Prescribed Fire An intentionally ignited fire that burns under specified conditions (prescription) that allow the fire to be confined to a predetermined area and produce both the fire behavior and fire characteristics required to achieve planned fire treatment and resource management objectives.

## Attachment Two: Standard Protection Measures

---

Attachment 1 – Page 11

# ATTACHMENT TWO

## STANDARD PROTECTION MEASURES

### FOR

## CULTURAL RESOURCES IN PRESCRIBED FIRE AREAS

If BLM chooses to defer National Register evaluation of previously unevaluated at-risk cultural resources by protecting or avoiding effects to those resources, or chooses to protect or avoid effects to cultural resources included in, or previously determined eligible for, inclusion in the National Register of Historic Places, the following standard protection measures may be applied by the BLM, and prescribed fire may be applied to the area surrounding the resource(s) without further SHPO consultation.

1. Communication. The locations, boundary information, and prescriptions (avoidance or protective measures) for at-risk cultural resources will be conveyed in writing and depicted on maps from the Field Office Archeologist to the Project Planner.
2. Flagging. Resources of interest within the proposed fire area will be clearly delineated by flagging or tagging site boundaries prior to the fire. Flagging must clearly identify areas to be avoided or protected and may include a buffer zone to extend the protection area around properties, as described below.
3. Buffer Zones. The establishment of a buffer zone surrounding an at-risk cultural resource may be employed to reduce the likelihood that inadvertent effects from project implementation might occur.
  - a. The use of buffer zones in conjunction with other avoidance measures are particularly applicable where setting may contribute to the property's eligibility under 36 CFR 60.4, or where it may be an important attribute of some types of historic properties (e.g., historic buildings or structures; properties important to Native Americans).
  - b. A Field Office Archeologist on a case-specific basis must determine the size of buffer zones and may consult with specialists or those with particular interest, including Native Americans.
  - c. The distinction between cultural resource boundaries and buffer zones must always be clear in site documentation and reports.
4. Prescribed fires may be redesigned to exclude the area containing and surrounding the cultural resource(s), such that no additional special protective measures are necessary to ensure that the fire or fire control activities will not affect the resource(s) and their setting(s).
5. Cultural resources may be protected by creating fire breaks that provide a sufficient buffer to ensure that the resources are not impacted by fire, as long as the environment (setting) of the resource within which the fire break is created could not contribute significantly to its

Attachment 1 – Page 12

importance. Fire breaks may be created without previous cultural resources inventory only when hand-clearing brush and vegetation, or when previous fire breaks are re-established by removing vegetation and existing graded or cleared surfaces (e.g., roads).

Mechanical equipment may be used to create fire breaks or grade existing roads or previous fire breaks only if the areas to be graded have been examined by a cultural resource specialist and found not to contain archaeological or historical resources.

At the discretion of the Field Office Archeologist in consultation with the Project Planner, back burning may be used to remove brush and vegetation from the buffered perimeter of cultural resources in order to protect cultural resources from prescribed fires. However, the Field Office Archeologist must be present during these procedures to ensure that the at-risk cultural resources are not impacted.

6. Fire shelter fabric may be placed over cultural resources to protect them from burning when fuel removal is done to prevent high levels of radiant heat.
7. Fire retardant foam wetting agents without dyes or colorants may be applied to cultural resources and/or areas surrounding cultural resources to protect them from fire damage. Where feasible, wetting agents should be applied to the perimeter of cultural resources rather than directly on resources, although circumstances may warrant aerial or direct application.
8. Prescribed fires should be scheduled or designed to avoid burning cultural resources important to Native Americans if such burning would affect cultural values attached to those resources. In other instances, fires should be designed to maximize desirable natural resource productivity for areas important to Native Americans.